

Claims

1. Steel alloy characterized in having the following composition (in % by weight)

5	C	0,40-0,60
	Si	0,1-1,0
	Mn	0,3-1,0
	Cr	12-15
	Mo	2,5-4,0
10	Ni	0-1,0
	Co	0-4,0
	N	0,15-0,20,

with the balance Fe as well as normally occurring impurities, the hardness being > 56 HRC, which should be possible to be attained by hardening without deep freezing, as well as $PRE > 25$, defined as $PRE = \% Cr + 3,3 \cdot \% Mo + 16 \cdot \% N$.

2. Steel alloy according to claim 1, wherein $C = 0,42-0,60$, preferably $0,42-0,50$ % by weight.

3. Steel alloy according to claim 1 or 2, wherein $Si = 0,15-0,80$, preferably $0,15-0,55$ % by weight.

4. Steel alloy according to any one of claims 1-3, wherein $Mn = 0,4-0,8$, preferably $0,4-0,7$ % by weight.

5. Steel alloy according to any one of the preceding claims, wherein $Cr = 13-15$, preferably $14-15$ % by weight.

6. Steel alloy according to any one of the preceding claims, wherein $Mo = 2,6-4,0$, preferably $2,6-3,0$ % by weight.

7. Steel alloy according to any one of the preceding claims, the steel alloy comprising carbides, nitrides and/or carbonitrides, wherein the maximal diameter of the carbides, nitrides and/or carbonitrides does not exceed 5
5 μm .

8. Knife, such as a knife suitable for the food industry, carving knife and the like, c h a r a c t e r i z e d in that it comprises a steel alloy according to any one of
10 claims 1-7.

9. Cutting edges for either dry or wet shaving, c h a r a c t e r i z e d in that they comprise a steel alloy according to any one of claims 1-7.

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10. Cutting tool for surgical applications, such as for instance a scalpel, c h a r a c t e r i z e d in that it comprises a steel alloy according to any one of claims 1-7.

20 11. Doctor blade or creping blade, c h a r a c t e r i z e d in that it comprises a steel alloy according to any one of claims 1-7.